

PATENTS  
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**IN THE CLAIMS:**

1. (Currently Amended) A membrane electrode assembly for use in a direct oxidation fuel cell comprising:

a barrier layer of material that is substantially protonically non-conductive and which is substantially impermeable to water and carbonaceous fuel;

first and second protonically conductive membranes disposed, respectively, on opposite surfaces of said barrier layer;

selected sites comprising openings providing passages through [[in]] said barrier layer enabling protonically conductive contact through said passages between said first and second membranes;

first and second catalysts disposed, respectively, on the surfaces of said membranes which are not in contact with said barrier layer; and

first and second diffusion material layers disposed, respectively, on the surfaces of said catalysts which are not in contact with said membranes.

2. (Currently Amended) The assembly as in claim 1 wherein said barrier layer comprises a microporous material.

3. (Currently Amended) The assembly as in claim 1 wherein said barrier layer comprises a polyester microfilm with microperforations.

4. (Currently Amended) The assembly as in claim 1 wherein said barrier layer comprises a polyimide film with microperforations.

5. (Original) The assembly as in claim 1 wherein said assembly is used in a direct methanol fuel cell.